

WHAT IS CLAIMED IS:

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1. A mobile device comprising:  
a housing having an expansion module bay;  
an expansion module having a first USB connector; and  
a second USB connector positioned inside the bay to mate with the  
5 first USB connector when the expansion module is inserted in the bay.
2. The device of claim 1, wherein the first and second connectors  
have a form factor that is different than a standard USB form factor.
3. The device of claim 1, wherein the first and second connectors  
have a form factor that is smaller than a standard USB form factor.
4. The device of claim 1, further comprising a USB controller inside  
the housing of the mobile device.
5. The device of claim 4, wherein the USB controller is configured  
to function as a USB host.
6. The device of claim 4, wherein the USB controller is configured  
to function as a USB device.
7. The device of claim 1, wherein the expansion module further  
includes a USB interface and a conversion circuit coupled between the  
USB interface and the second USB connector.
8. The device of claim 7, wherein the conversion circuit reduces  
the voltage of a signal on the second USB connector to a corresponding  
interface voltage and provides the reduced voltage to the interface if the

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5 voltage on the second USB connector is higher than the corresponding interface voltage.

9. The device of claim 7, wherein the conversion circuit boosts the voltage of a signal on the second USB connector to a corresponding interface voltage and provides the boosted voltage to the interface if the voltage on the second USB connector is less than the corresponding  
5 interface voltage.

10. The device of claim 7, wherein the conversion circuit reduces the voltage of an interface signal to a voltage expected at the second connector and provides the reduced voltage to the second connector if the interface voltage is greater than expected.

11. The device of claim 7, wherein the conversion circuit boosts the voltage of an interface signal to a voltage expected at the second connector and provides the boosted voltage to the second connector if the interface voltage is less than expected.

12. The device of claim 1, further comprising a USB controller and a conversion circuit within the housing, the conversion circuit coupled between the USB controller and the first USB connector.

13. The device of claim 12, wherein the conversion circuit reduces the voltage of a signal on the first USB connector to a corresponding controller voltage and provides the reduced voltage to the controller if the voltage on the first USB connector is higher than the corresponding  
5 controller voltage.

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5 14. The device of claim 12, wherein the conversion circuit boosts the voltage of a signal on the first USB connector to a corresponding controller voltage and provides the boosted voltage to the controller if the voltage on the first USB connector is less than the corresponding controller voltage.

5 15. The device of claim 12, wherein the conversion circuit reduces the voltage of a controller signal to a voltage expected at the first connector and provides the reduced voltage to the first connector if the controller voltage is greater than the corresponding voltage expected at the first connector.

5 16. The device of claim 12, wherein the conversion circuit boosts the voltage of a controller signal to a voltage expected at the first connector and provides the boosted voltage to the first connector if the controller voltage is less than the corresponding voltage expected at the first connector.

17. The device of claim 1, further comprising an adapter having a third connector that is connected to a fourth connector, the third connector being a USB connector having a standard USB form factor, the fourth connector configured to mate with one of the first and second connectors.

5 18. A mobile device comprising:  
a housing having an expansion module bay;  
a USB controller within the housing; and  
a USB connector coupled to the USB controller, the USB connector positioned within the expansion bay module in an expansion module-receiving position.

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19. The device of claim 18, wherein the USB connector has a non-standard USB form factor.

20. The device of claim 18, further comprising a conversion circuit within the housing and coupled between the USB controller and the USB connector.

21. The device of claim 20, wherein the conversion circuit reduces the voltage of a signal on the USB connector to a corresponding controller voltage and provides the reduced voltage to the controller if the voltage on the USB connector is higher than the corresponding controller voltage.

22. The device of claim 20, wherein the conversion circuit boosts the voltage of a signal on the USB connector to a corresponding controller voltage and provides the boosted voltage to the controller if the voltage on the USB connector is less than the corresponding controller voltage.

23. The device of claim 20, wherein the conversion circuit reduces the voltage of a controller signal to a voltage expected at the USB connector and provides the reduced voltage to the USB connector if the controller voltage is greater than the corresponding voltage expected at the USB connector.

24. The device of claim 20, wherein the conversion circuit boosts the voltage of a controller signal to a voltage expected at the USB connector and provides the boosted voltage to the USB connector if the controller voltage is less than the corresponding voltage expected at the USB connector.

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25. The device of claim 18, wherein the USB controller is a USB host.

26. The device of claim 18, wherein the USB controller is a USB device.

27. A personal digital assistant comprising:  
a housing having an expansion module bay;  
a USB controller within the housing; and  
a USB connector for the USB controller, the USB connector being  
5 positioned within the expansion module bay, the USB connector being  
positioned to receive a mating USB connector of an expansion module.

28. An expansion module for a mobile device, the expansion  
module comprising:  
a USB interface; and  
a USB connector for the USB interface.

29. The device of claim 28, wherein the USB connector has a non-  
standard USB form factor.

30. The device of claim 28, further comprising a conversion circuit  
coupled between the USB interface and the USB connector.

31. The device of claim 30, wherein the conversion circuit reduces  
the voltage of a signal on the USB connector to a corresponding interface  
voltage and provides the reduced voltage to the interface if the voltage on  
the USB connector is higher than the corresponding expansion module  
5 voltage.

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32. The device of claim 30, wherein the conversion circuit boosts the voltage of a signal on the USB connector to a corresponding interface voltage and provides the boosted voltage to the interface if the voltage on the USB connector is less than the corresponding expansion module  
5 voltage.

33. The device of claim 30, wherein the conversion circuit reduces the voltage of an interface signal to a voltage expected at the USB connector and provides the reduced voltage to the USB connector if the interface voltage is greater than the corresponding voltage expected at the  
5 USB connector.

34. The device of claim 30, wherein the conversion circuit boosts the voltage of an interface signal to a voltage expected at the USB connector and provides the boosted voltage to the USB connector if the interface voltage is less than the corresponding voltage expected at the  
5 USB connector.